

Application No. 10/618,112  
Amendment dated September 23, 2005  
Reply to Final Office Action of July 19, 2005

Docket No. 1232-5081

### **REMARKS**

Applicants respectfully request reconsideration of this application in view of the foregoing amendment and following remarks.

#### **Status of the Claims**

Claims 1-16 are pending in this application. Claims 1 and 14 are independent. All of the pending claims stand rejected. By this amendment, claims 1, 2, 4, 6, 11, 12, 14 and 15 are amended. Dependent claims 13 and 16 are cancelled without prejudice or disclaimer. No new matter has been added by this amendment.

#### **Objection**

##### **CLAIMS**

Claims 1 and 13 have been objected to because of informalities. Referring to claim 1, the Examiner indicates that an --and-- should be inserted at lines 5-6, and the "said" at line 9 should be replaced with --the--. The Examiner further indicates that the term "clement" should be replaced with --element--.

As indicated above, claim 1 has been amended addressing the objections and claim 13 has been cancelled.

Applicants respectfully request that these objections be withdrawn.

#### **Rejection under 35 U.S.C. §112**

In paragraph three (3) of the Final Office Action, claims 13 and 16 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner indicates that the term "or the like" renders the claims indefinite.

As indicated above, claims 13 and 16 have been cancelled rendering the rejections

Application No. 10/618,112  
Amendment dated September 23, 2005  
Reply to Final Office Action of July 19, 2005

Docket No. 1232-5081

directed to these claims moot.

**Rejection under 35 U.S.C. §102**

In paragraph three (3) of the Office action, claims 13 and 16 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,995,582 to Terashima et al. ("Terashima").

As indicated above, claims 13 and 16 have been cancelled rendering rejections directed to these claims moot.

In paragraph five (5) of the Final Office Action, claims 1, 2, 7 and 11 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,160,848 to Saitoh et al. ("Saitoh").

Independent claim 1 has been amended for further clarification. In particular, amended claim 1 recites a measuring apparatus having, *inter alia*, a first detector that detects the intensity of a diffraction light of a predetermined order, of a plurality of diffraction lights of different orders, which is not being reflected by an object to be measured.

With the feature of amended claim 1 as discussed above, any changes in intensity of light emitted from a light source that is incident on the diffraction grating can be monitored with an improved accuracy.

Saitoh discloses a device for measuring a gap between two opposing objects (e.g., plates) using the lights diffracted at the two objects. In Saitoh, however, both of the detectors detect light reflected by the wafer (i.e., object to be measured). In other words, Saitoh's device does not include any detector that may detect diffraction light of a predetermined order which is not reflected by the wafer (i.e., object to be measured) as specifically recited in amended claim 1.

Application No. 10/618,112  
Amendment dated September 23, 2005  
Reply to Final Office Action of July 19, 2005

Docket No. 1232-5081

Accordingly, claim 1 as amended is neither anticipated by nor rendered obvious in view of Saitoh for at least the reasons discussed above.

Reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §102(b) is respectfully requested.

**Rejection under 35 U.S.C. §103**

In paragraph eleven (11) of the Final Office Action, claims 4-6, 12, 14 and 15 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Saitoh in view of U.S. Patent No. 5,377,009 to Kitaoka et al. ("Kitaoka").

Kitaoka is cited as disclosing a mirror provided between a diffraction grating and detecting means.

As shown above, claim 14 has been amended to depend from claim 1 as amended. As a result, each of rejected claims 4-6, 12, 14 and 15 depends from claim 1 as amended either directly or indirectly.

Since Kitaoka fails to show or suggest at least the features of amended claim 1 as discussed above (i.e., a first detector), each of claims 4-6, 12, 14 and 15, in depending from claim 1 as amended, is neither anticipated by nor rendered obvious in view of the cited references (i.e., Saito and Kitaoka), either taken alone or in combination.

Reconsideration and withdrawal of the rejections of claims 4-6, 12, 14 and 15 under 35 U.S.C. §103(a) is respectfully requested.

Applicants have not individually addressed the rejections of all of the the dependent claims because Applicants submit that the independent claims from which they respectively depend are in condition for allowance as set forth above. Applicants however reserve the right to

Application No. 10/618,112  
Amendment dated September 23, 2005  
Reply to Final Office Action of July 19, 2005

Docket No. 1232-5081

address such rejections of the dependent claims should such be necessary.

Applicants believe that the application is in condition for allowance and such action is respectfully requested.

### **AUTHORIZATION**

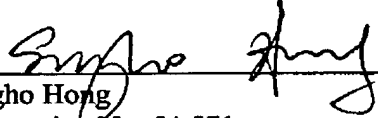
No petitions or additional fees are believed due for this amendment and/or any accompanying submissions. However, to the extent that any additional fees and/or petition is required, including a petition for extension of time, Applicants hereby petition the Commissioner to grant such petition, and hereby authorizes the Commissioner to charge any additional fees, including any fees which may be required for such petition, or credit any overpayment to Deposit Account No. 13-4500 (Order No. 1232-5081). A DUPLICATE COPY OF THIS SHEET IS ENCLOSED.

An early and favorable examination on the merits is respectfully requested.

Respectfully submitted,  
MORGAN & FINNEGAN, L.L.P.

Dated: September 23, 2005

By:

  
Sungho Hong  
Registration No. 54,571

**Correspondence Address:**

MORGAN & FINNEGAN, L.L.P.  
3 World Financial Center  
New York, NY 10281-2101  
(212) 415-8700 (Telephone)  
(212) 415-8701 (Facsimile)

Application No. 10/618,112  
Amendment dated September 23, 2005  
Reply to Final Office Action of July 19, 2005

Docket No. 1232-5081

address such rejections of the dependent claims should such be necessary.

Applicants believe that the application is in condition for allowance and such action is respectfully requested.

### **AUTHORIZATION**

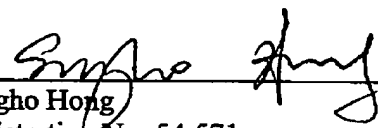
No petitions or additional fees are believed due for this amendment and/or any accompanying submissions. However, to the extent that any additional fees and/or petition is required, including a petition for extension of time, Applicants hereby petition the Commissioner to grant such petition, and hereby authorizes the Commissioner to charge any additional fees, including any fees which may be required for such petition, or credit any overpayment to Deposit Account No. 13-4500 (Order No. 1232-5081). A DUPLICATE COPY OF THIS SHEET IS ENCLOSED.

An early and favorable examination on the merits is respectfully requested.

Respectfully submitted,  
MORGAN & FINNEGAN, L.L.P.

Dated: September 23, 2005

By:

  
Sungho Hong  
Registration No. 54,571

**Correspondence Address:**

MORGAN & FINNEGAN, L.L.P.  
3 World Financial Center  
New York, NY 10281-2101  
(212) 415-8700 (Telephone)  
(212) 415-8701 (Facsimile)